

R. Scott Liggett  
C & C Fiberglass, Inc.  
3659 Destiny Drive  
Bremen, Indiana 46506

Re: Significant Source Modification No:  
**SSM 099-12250-00080**

Dear Mr. Liggett:

C & C Fiberglass, Inc., applied for a Part 70 operating permit on September 2, 1998, for a fiberglass parts manufacturing source. An application to modify the source was received on May 3, 2000. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

**Tub and Shower Division**

- (a) Three (3) gel coat booths, utilizing air assisted airless spray guns, with a total capacity to produce 21.9 tub/shower units per hour. Particulate emissions shall be controlled by dry filters, then exhausted to stacks S1b, S2b and S3b.
- (b) One (1) laminating area, utilizing flow coaters, with a total capacity to produce 21.9 tub/shower units per hour. Particulate emissions shall be controlled by dry filters, then exhausted to stacks S4b and S5b.
- (c) One (1) grinding area, with particulate emissions controlled by a Torit-Donaldson dust collector, then exhausted inside the building through stacks S7b and S8b.

The proposed Significant Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3). If there are no changes to the proposed construction of the emission units, the source may begin operating on the date that IDEM receives an affidavit of construction pursuant to 326 IAC 2-7-10.5(h). If there are any changes to the proposed construction the source can not operate until an Operation Permit Validation Letter is issued.

C & C Fiberglass, Inc.  
Bremen, Indiana

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This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, press 0 and ask for Patrick T. Brennan, c/o OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 631-691-3395 or in Indiana at 1-800-451-6027 (ext 631-691-3395).

Sincerely,

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Management

Attachments  
PTB/MES

cc: File - Marshall County  
U.S. EPA, Region V  
Marshall County Health Department  
Northern Regional Office  
Air Compliance Section Inspector - Rick Reynolds  
Compliance Data Section - Mendy Jones  
Administrative and Development - Janet Mobley  
Technical Support and Modeling - Michele Boner

# **PART 70 SIGNIFICANT SOURCE MODIFICATION OFFICE OF AIR MANAGEMENT**

**C & C Fiberglass, Inc.  
3659 Destiny Drive  
Bremen, Indiana 46506**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: SSM 099-12250-00080	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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## SECTION A

## SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

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The Permittee owns and operates a stationary fiberglass parts manufacturing source.

Responsible Official: Cletis A. Miller  
Source Address: 3659 Destiny Drive, Bremen, Indiana 46506  
Mailing Address: 3659 Destiny Drive, Bremen, Indiana 46506  
Phone Number: 219 - 546 - 2868  
SIC Code: 3089  
County Location: Marshall  
County Status: Attainment for all criteria pollutants  
Source Status: Part 70 Permit Program  
Minor Source, under PSD Rules;  
Major Source, Section 112 of the Clean Air Act

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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This stationary fiberglass parts manufacturing source is approved to construct and operate the following emission units and pollution control devices:

#### **Tub and Shower Division**

- (a) Three (3) gel coat booths, utilizing air assisted airless spray guns, with a total capacity to produce 21.9 tub/shower units per hour. Particulate emissions shall be controlled by dry filters, then exhausted to stacks S1b, S2b and S3b.
- (b) One (1) laminating area, utilizing flow coaters, with a total capacity to produce 21.9 tub/shower units per hour. Particulate emissions shall be controlled by dry filters, then exhausted to stacks S4b and S5b.
- (c) One (1) grinding area, with particulate emissions controlled by a Torit-Donaldson dust collector, then exhausted inside the building through stacks S7b and S8b.

### A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

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This stationary fiberglass tub and shower manufacturing source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);

## **SECTION B                      GENERAL CONSTRUCTION CONDITIONS**

### **B.1      Permit No Defense [IC 13]**

This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

### **B.2      Definitions [326 IAC 2-7-1]**

Terms in this approval shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

### **B.3      Effective Date of the Permit [IC13-15-5-3]**

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

### **B.4      Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]**

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

### **B.5      Significant Source Modification [326 IAC 2-7-10.5(h)]**

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.
- (b) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.
- (c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.

However, in the event that the Title V application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:

- (1) If the Title V draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Title V draft.
- (2) If the Title V permit has gone thru final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go thru a concurrent 45 day EPA review. Then the Significant Source Modification will

be incorporated into the final Title V permit at the time of issuance.

- (3) If the Title V permit has not gone thru final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Title V permit, and the Title V permit will issued after EPA review.



C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

- C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]  
[326 IAC 1-6-3]

- Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

- ### C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this approval.
- (b) Any application requesting an amendment or modification of this approval shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

#### C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this approval:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

#### C.5 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided in this approval, all air pollution control equipment listed in this approval and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment is are in operation.

#### C.6 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

### Testing Requirements [326 IAC 2-7-6(1)]

#### C.7 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

- (a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit

a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

#### **Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]**

##### **C.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

Compliance with applicable requirements shall be documented as required by this approval. All monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

#### **Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]**

##### **C.9 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]**

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:

- (1) This condition;
- (2) The Compliance Determination Requirements in Section D of this permit;
- (3) The Compliance Monitoring Requirements in Section D of this permit;
- (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and

- (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM, when applicable). The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
  - (A) Reasonable response steps that may be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
  - (B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) Upon investigation of a compliance monitoring excursion, the Permittee is excused from taking further response steps for any of the following reasons:
  - (1) A false reading occurs due to the malfunction of the monitoring equipment. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
  - (3) An automatic measurement was taken when the process was not operating; or
  - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (e) All monitoring required in Section D shall be performed at all times the equipment is operating. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.
- (f) If for reasons beyond its control, the Permittee fails to perform the monitoring and record keeping as required by Section D, then the reasons for this must be recorded.
  - (1) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent of the operating time in any quarter.
  - (2) Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.

C.10 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]  
[326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this approval exceed the level specified in any condition of this approval, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate approval conditions may be grounds for immediate revocation of the approval to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

C.11 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

- (a) With the exception of performance tests conducted in accordance with Section C- Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this approval shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this approval is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this approval.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.12 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or appli-

cation. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;
  - (5) The results of such analyses; and
  - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this approval;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;
  - (3) All calibration and maintenance records;
  - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this approval, and whether a deviation from an approval condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance.

C.13 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) The reports required by conditions in Section D of this approval shall be submitted to:  
  
Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015
- (b) Unless otherwise specified in this approval, any notice, report, or other submission required by this approval shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the

date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

- (c) Unless otherwise specified in this approval, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The first report shall cover the period commencing on the date of issuance of this approval and ending on the last day of the reporting period.

## SECTION D.1

## EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description - A fiberglass tub and shower manufacturing facility consisting of the following:

### **Tub and Shower Division**

- (a) Three (3) gel coat booths, utilizing air assisted airless spray guns, with a total capacity to produce 21.9 tub/shower units per hour. Particulate emissions shall be controlled by dry filters, then exhausted to stacks S1b, S2b and S3b.
- (b) One (1) laminating area, utilizing flow coaters, with a total capacity to produce 21.9 tub/shower units per hour. Particulate emissions shall be controlled by dry filters, then exhausted to stacks S4b and S5b.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

## **Emission Limitations and Standards**

### **D.1.1 New Source Toxics Control [326 IAC 2-4.1-1]**

Pursuant to the MACT determination under 326 IAC 2-4.1-1, operating conditions for the new fiberglass tub and shower manufacturing facility shall be the following:

- (a) Use of resins and gel coats that contain styrene shall be limited such that the potential to emit (PTE) volatile organic HAP from use of such resins and gel coats only shall be less than 100 tons per twelve (12) consecutive month period. Compliance with this limit shall be determined based upon the following criteria:
  - (1) Monthly usage by weight, content of monomer that is HAP, method of application, and other emission reduction techniques used for each gel coat and resin shall be recorded. Volatile organic HAP emissions shall be calculated by multiplying the usage of each gel coat and resin by the emission factor that is appropriate for the HAP monomer content, method of application, and other emission reduction techniques used for each gel coat and resin, and summing the emissions for all gel coats and resins. Emission factors shall be obtained from the reference approved by IDEM, OAM.
  - (2) The emission factors approved for use by IDEM, OAM shall be taken from the following reference: "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association, April 1999, with the exception of the emission factors for controlled spray application. This reference is included with this permit. For HAP-emitting operations not addressed by this reference, emission factors shall be taken from U.S. EPA's AP-42 document. For the purposes of these emission calculations, HAP monomer in resins and gel coats that is not styrene or methyl methacrylate shall be considered as styrene on an equivalent weight basis.
- (b) The HAP monomer content of resins and gel coats used shall be limited to the following or their equivalent on an emissions mass basis:



Type of Gel Coat or Resin	HAP Monomer Content, % by weight
Production <sup>1</sup> Gel Coat	37
Tooling <sup>2</sup> Gel Coat	38
Production Resin	35
Tooling Resin	43

<sup>1</sup> Production refers to the manufacture of parts.

<sup>2</sup> Tooling refers to the manufacture of the molds from which parts are manufactured.

HAP monomer contents shall be calculated on a neat basis, which means excluding any filler. Compliance with these HAP monomer content limits shall be demonstrated on a monthly basis.

Gel coats or resins with HAP monomer contents lower than those specified in the table in this subsection or additional emission reduction techniques approved by IDEM, OAM may be used to offset the use of gel coats or resins with HAP monomer contents higher than those specified in the table in this subsection. This is allowed to meet the HAP monomer content limits for resins and gel coats and shall be calculated on an equivalent emissions mass basis as shown below:

(Emissions from higher than compliant HAP monomer content resin or gel coat) - (Emissions from compliant resin or gel coat)  $\#$  (Emissions from compliant resin or gel coat) - (Emissions from lower than compliant HAP monomer content resin or gel coat and/or using other emission reduction techniques).

Where: Emissions, lb or ton = M (mass of resin or gel coat used, lb or ton) \*  
EF (HAP monomer emission factor for resin or gel coat used, %);

EF, HAP monomer emission factor = emission factor, expressed as pounds (lbs) HAP emitted per ton of resin/gel coat processed, which is indicated by the HAP monomer content, method of application, and other emission reduction techniques for each gel coat and resin used.

- (c) Non-atomized spray application technology shall be used to apply unfilled production resins. Non-atomized spray application technology includes flow coaters, flow choppers, pressure-fed rollers, or other non-spray applications of a design and specifications approved by IDEM, OAM.

If it is not possible to apply a portion of unfilled resins with non-atomized spray application technology, equivalent emissions reductions must be obtained via use of other emission reduction techniques. Examples of other emission reduction techniques include, but are not limited to, lower HAP monomer content resins and gel coats, closed molding, vapor suppression, vacuum bagging/bonding, or installing a control device.

- (d) Optimized spray techniques according to a manner approved by IDEM, OAM shall be used for gel coats and filled resins (where fillers are required for corrosion or fire retardant purposes) at all times. Optimized spray techniques include, but are not limited to, the use of airless, air-assisted airless, high volume low pressure (HVLP), or other spray applicators demonstrated to the satisfaction of IDEM, OAM, to be equivalent to the spray applicators listed above.

HVLP spray is the technology used to apply material to substrate by means of application equipment that operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

- (e) The listed work practices shall be followed:
- (1) To the extent possible, a non-VOC, non-HAP solvent shall be used for cleanup.
  - (2) For VOC- and/or HAP-containing materials:
    - (i) Cleanup solvent containers shall be used to transport solvent from drums to work.
    - (ii) Cleanup stations shall be closed containers having soft-gasketed, spring-loaded closures and shall be kept completely closed when not in use.
    - (iii) Cleanup rags saturated with solvent shall be stored, transported, and disposed of in containers that are closed tightly.
    - (iv) The spray guns used shall be the type that can be cleaned without the need for spraying the solvent into the air.
    - (v) All solvent sprayed during cleanup or resin changes shall be directed into containers. Such containers shall be closed as soon as solvent spraying is complete and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
  - (3) All material storage containers shall be kept covered when not in use.

**D.1.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]**

The PM from the gel coat booths and lamination area shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

**D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]**

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this emissions unit and any control devices.

**Compliance Determination Requirements**

**D.1.4 Testing Requirements [326 IAC 2-1.1-11]**

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the volatile organic HAP limit specified in Condition D.1.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

**D.1.5 Volatile Organic HAPs**

Compliance with the volatile organic HAP content and usage limitations contained in Condition D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

**D.1.6 Volatile Organic HAPs Emissions**

Compliance with Condition D.1.1 shall be demonstrated within 30 days of the end of each month based on the total volatile organic HAP usage for the most recent twelve (12) month period.

**Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]**

**D.1.7 Particulate Matter (PM)**

The dry filters for PM control shall be in operation at all times when the gel coat booths and lamination area are in operation.

**D.1.8 Monitoring**

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the gelcoat booths and lamination area stacks while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stacks and the presence of overspray on the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

**Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]**

**D.1.9 Record Keeping Requirements**

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the volatile organic HAP usage limits and/or the volatile organic HAP content limits established in Condition D.1.1.
  - (1) The amount, VOC content and volatile organic HAP content of each resin and gelcoat. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
  - (2) A log of the dates of use;

- (3) The HAP monomer content for resins and gelcoats calculated on an equivalent mass basis for each month in which noncompliant resins or gelcoats are used.
  - (4) The cleanup solvent usage for each month;
  - (5) The total VOC and volatile organic HAP usage for each month; and
  - (6) The weight of VOCs and volatile organic HAPs emitted for each compliance period.
- (b) To document compliance with Condition D.1.7 and D.1.8, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.1.10 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

## SECTION D.2

## EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description - A fiberglass tub and shower manufacturing facility consisting of the following:

### **Tub and Shower Division**

- (c) One (1) grinding area, with particulate emissions controlled by a Torit-Donaldson dust collector, then exhausted inside the building through stacks S7b and S8b.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

## **Emission Limitations and Standards**

### **D.2.1 Particulate Matter (PM) [326 IAC 6-3]**

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the grinding area shall not exceed 4.06 pounds per hour when operating at a process weight rate of 1971 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour

## **Compliance Determination Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]**

### **D.2.2 Testing Requirements [326 IAC 2-1.1-11]**

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

### **D.2.3 Particulate Matter (PM)**

The grinding area dry filters for PM control shall be in operation at all times when the grinding area is in operation.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION**

**PART 70 SOURCE MODIFICATION  
CERTIFICATION**

Source Name: C & C Fiberglass, Inc.  
Source Address: 3659 Destiny Drive, Bremen, Indiana 46506  
Mailing Address: 3659 Destiny Drive, Bremen, Indiana 46506  
Source Modification No.: 099-12250-00080

**This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.**

Please check what document is being certified:

- 9 Test Result (specify) \_\_\_\_\_
- 9 Report (specify) \_\_\_\_\_
- 9 Notification (specify) \_\_\_\_\_
- 9 Other (specify) \_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION**

**Part 70 Source Modification Quarterly Report**

Source Name: C & C Fiberglass, Inc., Tub and Shower Division  
Source Address: 3659 Destiny Drive, Bremen, Indiana 46506  
Mailing Address: 3659 Destiny Drive, Bremen, Indiana 46506  
Source Modification No.: SSM 099-12250-00080  
Facility: Tub and Shower Division  
Parameter: Volatile Organic HAP emissions  
Limit: Less than 100 tons per consecutive twelve (12) month period

YEAR: \_\_\_\_\_

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Mail to: Permit Administration & Development Section  
Office of Air Management  
100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015

C & C Fiberglass, Inc.  
3659 Destiny Drive  
Bremen, Indiana 46506

**Affidavit of Construction**

I, \_\_\_\_\_, being duly sworn upon my oath, depose and say:  
(Name of the Authorized Representative)

1. I live in \_\_\_\_\_ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.
2. I hold the position of \_\_\_\_\_ for \_\_\_\_\_.  
(Title) (Company Name)
3. By virtue of my position with \_\_\_\_\_, I have personal knowledge of the  
(Company Name)  
representations contained in this affidavit and am authorized to make these representations on behalf of  
\_\_\_\_\_.  
(Company Name)
4. I hereby certify that C & C Fiberglass, Inc., Tub and Shower Division, 3659 Destiny Drive, Bremen, Indiana 46506, has constructed the fiberglass tub and shower manufacturing facility in conformity with the requirements and intent of the Part 70 Operating Permit application received by the Office of Air Management on May 3, 2000 and as permitted pursuant to **Part 70 SSM 099-12250, Plant ID No. 099-00080** issued on \_\_\_\_\_.

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

STATE OF INDIANA)  
SS

COUNTY OF \_\_\_\_\_ )

Subscribed and sworn to me, a notary public in and for \_\_\_\_\_ County and State of  
Indiana on this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_.

My Commission expires: \_\_\_\_\_.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name (typed or printed)



## **Indiana Department of Environmental Management Office of Air Management**

### **Technical Support Document (TSD) for a Part 70 Significant Source Modification**

#### **Source Background and Description**

<b>Source Name:</b>	<b>C &amp; C Fiberglass, Inc.</b>
<b>Source Location:</b>	<b>3659 Destiny Drive, Bremen, Indiana 46506</b>
<b>County:</b>	<b>Marshall</b>
<b>SIC Code:</b>	<b>3089</b>
<b>Operation Permit No.:</b>	<b>T 099-10107-00080</b>
<b>Operation Permit Issuance Date:</b>	<b>Not Yet Issued</b>
<b>Significant Source Modification No.:</b>	<b>SSM 099-12250-00080</b>
<b>Permit Reviewer:</b>	<b>Patrick T. Brennan</b>

The Office of Air Management (OAM) has reviewed a modification application from C&C Fiberglass Inc., relating to the construction of the following emission units and pollution control devices:

#### **Significant Emission Units**

##### **Tub and Shower Division**

- (a) Three (3) gel coat booths, utilizing air assisted airless spray guns, with a total capacity to produce 21.9 tub/shower units per hour. Particulate emissions shall be controlled by dry filters, then exhausted to stacks S1b, S2b and S3b.
- (b) One (1) laminating area, utilizing flow coaters, with a total capacity to produce 21.9 tub/shower units per hour. Particulate emissions shall be controlled by dry filters, then exhausted to stacks S4b and S5b.
- (c) One (1) grinding area, with particulate emissions controlled by a Torit-Donaldson dust collector, then exhausted inside the building through stacks S7b and S8b.

#### **Insignificant Activities**

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour.
- (b) VOC and HAP storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.
- (c) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (d) Paved and unpaved roads and parking lots with public access.
- (e) Equipment used to collect any material that might be released during a malfunction, process

upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.

### History

On May 3, 2000, C&C Fiberglass, Inc., submitted an application to the OAM requesting to construct a Tub and Shower Division, in a building directly adjacent to their existing RV parts manufacturing facility, known as the Transportation Division. The source was originally permitted as CP-099-7131, issued on July 23, 1997, with a street address of 16502 Destiny Drive, Bremen, Indiana. This address was incorrect, and was caused by a real estate error. The source was constructed at and has always been located at 3659 Destiny Drive, Bremen, Indiana.

### Existing Approvals

The source applied for a Part 70 Operating Permit T 099-10107-00080, on September 2, 1998. The source has been operating under previous approvals including, but not limited to the following:

- (a) Permit CP-099-7131 issued on July 23, 1997.

### Source Definition

This recreational vehicle parts company consists of two (2) plants:

- (a) The existing Transportation Division is located at 3659 Destiny Drive, Bremen, Indiana.
- (b) The proposed Tub and Shower Division is located at 3659 Destiny Drive, Bremen, Indiana.

Since the two (2) plants are located on contiguous properties, have the same SIC codes and are owned by one (1) company, they will be considered one (1) source.

### Enforcement Issue

There are no enforcement actions pending.

### Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
S1b	Gel Coat Booth	21.0	2.50	12,220	70
S2b	Gel Coat Booth	21.0	2.50	12,220	70
S3b	Gel Coat Booth	21.0	2.50	12,220	70
S4b	Lamination Area	21.0	2.50	12,220	70
S5b	Lamination Area	21.0	2.50	12,220	70
S7b	Grinding Area	(inside)	NA	9,000	NA
S8b	Grinding Area	(inside)	NA	9,000	NA

### Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on May 3, 2000.

### Emission Calculations

The calculations submitted by the applicant have been verified and found to be accurate and correct. These calculations are provided in pages 1 through 6 of 6 of Appendix A of this document.

### Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	391
PM <sub>10</sub>	391
SO <sub>2</sub>	0.0
VOC	263
CO	0.0
NO <sub>x</sub>	0.0

HAPs	Potential To Emit (tons/year)
Styrene	228
Methyl Methacrylate	31
TOTAL	259

### Actual Emissions

The following table shows the actual emissions from the source. This information reflects information provided by the source in an updated Part 70 application submitted along with the significant source modification application on May 3, 2000.

Pollutant	Actual Emissions (tons/year)
PM	42.2
PM <sub>10</sub>	42.2
SO <sub>2</sub>	<0.01
VOC	36.6
CO	0.02
NO <sub>x</sub>	0.02
Styrene	34.8
Methyl Methacrylate	1.86

### County Attainment Status

The source is located in Marshall County.

Pollutant	Status
PM <sub>10</sub>	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone standards. Marshall County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Marshall County has been classified as attainment or unclassifiable for the remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

### Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	9.16
PM <sub>10</sub>	9.16
SO <sub>2</sub>	<0.04
VOC	83.0
CO	0.09
NO <sub>x</sub>	0.26

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.
- (b) These emissions are based upon information provided by the source in an updated Part 70 application submitted on May 3, 2000.

### Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Proposed Modification	6.89	6.89	0.0	100	0.0	0.0	98.7
PSD Threshold Level	250	250	250	250	250	250	-

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD threshold levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

### Potential to Emit of the Entire Source After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification. Following the issuance of the Significant Source Modification, the source will be operating under two separate VOC limits. The VOC limit for the Transportation Division is 83 tons per twelve (12) consecutive month period as specified in CP 099-7131-00055.

The VOC limit for the Tub and Shower Division is 100 tons per twelve (12) consecutive month period, as determined in this Significant Source Modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Transportation Division				less than 83			
Tub and Shower Division				less than 100			
Entire Source	less than 250	less than 250	less than 250	less than 250	less than 250	less than 250	-

The modified source will continue to be minor because the potential to emit of all criteria pollutants will remain below 250 tons per year. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

#### Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source has submitted their Part 70 (T099-10107-00080) application on September 2, 1998. The Tub and Shower Division facilities being reviewed under this permit shall be incorporated in the submitted Part 70 application.

#### Justification for Modification

- (a) The Part 70 Operating Permit is being modified through a Part 70 Significant Source Modification to a yet to be issued Part 70 Operating Permit because the potential to emit volatile organic compounds (VOC) and particulate matter (PM) before controls of this modification exceeds twenty five (25) tons per year. This modification is being performed pursuant to 326 IAC 2-7-10.5(f)(4).
- (b) Since the Part 70 Operating Permit for this source has not been issued yet, the approval of this Significant Source Modification will allow the source to construct and operate.

#### Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.

#### State Rule Applicability - Individual Facilities

326 IAC 2-4.1-1 (New Source Toxics Control)

Since this new source has a potential to emit greater than 10 tons per year of any single HAP and 25 tons per year of any combination of HAPs, the requirements of 326 IAC 2-4.1-1 will apply.

Pursuant to the MACT determination under 326 IAC 2-4.1-1, operating conditions for the new Tub and Shower Division shall be the following:

- (a) Use of resins and gel coats that contain styrene shall be limited such that the potential to emit (PTE) volatile organic HAP from use of such resins and gel coats only shall be less than 100 tons per twelve (12) consecutive month period. Compliance with this limit shall be determined based upon the following criteria:
- (1) Monthly usage by weight, content of monomer that is HAP, method of application, and other emission reduction techniques used for each gel coat and resin shall be recorded. Volatile organic HAP emissions shall be calculated by multiplying the usage of each gel coat and resin by the emission factor that is appropriate for the HAP monomer content, method of application, and other emission reduction techniques used for each gel coat and resin, and summing the emissions for all gel coats and resins. Emission factors shall be obtained from the reference approved by IDEM, OAM.
  - (2) The emission factors approved for use by IDEM, OAM shall be taken from the following reference: "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association, April 1999, with the exception of the emission factors for controlled spray application. This reference is included with this permit. For HAP-emitting operations not addressed by this reference, emission factors shall be taken from U.S. EPA's AP-42 document. For the purposes of these emission calculations, HAP monomer in resins and gel coats that is not styrene or methyl methacrylate shall be considered as styrene on an equivalent weight basis.
- (b) The HAP monomer content of resins and gel coats used shall be limited to the following or their equivalent on an emissions mass basis:

Type of Gel Coat or Resin	HAP Monomer Content, % by weight
Production <sup>1</sup> Gel Coat	37
Tooling <sup>2</sup> Gel Coat	38
Production Resin	35
Tooling Resin	43

<sup>1</sup> Production refers to the manufacture of parts.

<sup>2</sup> Tooling refers to the manufacture of the molds from which parts are manufactured.

HAP monomer contents shall be calculated on a neat basis, which means excluding any filler. Compliance with these HAP monomer content limits shall be demonstrated on a monthly basis.

Gel coats or resins with HAP monomer contents lower than those specified in the table in this subsection or additional emission reduction techniques approved by IDEM, OAM may be used to offset the use of gel coats or resins with HAP monomer contents higher than those specified in the table in this subsection. This is allowed to meet the HAP monomer content limits for resins and gel coats and shall be calculated on an equivalent emissions mass basis as shown below:

(Emissions from higher than compliant HAP monomer content resin or gel coat) - (Emissions from compliant resin or gel coat)  $\div$  (Emissions from compliant resin or gel coat) - (Emissions from lower than compliant HAP monomer content resin or gel coat and/or using other emission reduction techniques).

Where: Emissions, lb or ton = M (mass of resin or gel coat used, lb or ton) \*  
EF (HAP monomer emission factor for resin or gel coat used, %);

EF, HAP monomer emission factor = emission factor, expressed as pounds (lbs) HAP emitted per ton of resin/gel coat processed, which is indicated by the HAP monomer content, method of application, and other emission reduction techniques for each gel coat and resin used.

- (c) Non-atomized spray application technology shall be used to apply unfilled production resins. Non-atomized spray application technology includes flow coaters, flow choppers, pressure-fed rollers, or other non-spray applications of a design and specifications approved by IDEM, OAM.

If it is not possible to apply a portion of unfilled resins with non-atomized spray application technology, equivalent emissions reductions must be obtained via use of other emission reduction techniques. Examples of other emission reduction techniques include, but are not limited to, lower HAP monomer content resins and gel coats, closed molding, vapor suppression, vacuum bagging/bonding, or installing a control device.

- (d) Optimized spray techniques according to a manner approved by IDEM, OAM shall be used for gel coats and filled resins (where fillers are required for corrosion or fire retardant purposes) at all times. Optimized spray techniques include, but are not limited to, the use of airless, air-assisted airless, high volume low pressure (HVLP), or other spray applicators demonstrated to the satisfaction of IDEM, OAM, to be equivalent to the spray applicators listed above.

HVLP spray is the technology used to apply material to substrate by means of application equipment that operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

- (e) The listed work practices shall be followed:

- (1) To the extent possible, a non-VOC, non-HAP solvent shall be used for cleanup.
- (2) For VOC- and/or HAP-containing materials:
  - (i) Cleanup solvent containers shall be used to transport solvent from drums to work.
  - (ii) Cleanup stations shall be closed containers having soft-gasketed, spring-loaded closures and shall be kept completely closed when not in use.
  - (iii) Cleanup rags saturated with solvent shall be stored, transported, and disposed of in containers that are closed tightly.



- (iv) The spray guns used shall be the type that can be cleaned without the need for spraying the solvent into the air.
  - (v) All solvent sprayed during cleanup or resin changes shall be directed into containers. Such containers shall be closed as soon as solvent spraying is complete and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
- (3) All material storage containers shall be kept covered when not in use.

326 IAC 6-3-2 (Process Operations)

- (a) The particulate matter (PM) emissions from the grinding area will be limited to 4.06 pounds per hour when operating at a process weight rate 1,971 pounds per hour. Since potential PM emissions after control by the Torit-Donaldson dust collector are 0.007 pounds per hour, the grinding operations will comply with this rule.

The pounds per hour limitation was calculated from the following equation.

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour, and} \\ P = \text{process weight rate in tons per hour.}$$

$$E = 4.10 (0.986 \text{ tons/hr})^{0.67} = 4.06 \text{ pounds per hour.}$$

Compliance will be demonstrated by operating the Torit-Donaldson dust collector at all times when the grinding is taking place.

- (b) The particulate matter (PM) emissions from the gel coat booths and laminating area shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour, and} \\ P = \text{process weight rate in tons per hour.}$$

Compliance will be demonstrated by operating the dry filters at all times when the gel coat booths and lamination area in operation.

326 IAC 8-1-6 (New facilities; General reduction requirements)

This modification is subject to 326 IAC 8-1-6 because the VOC potential emissions are greater than 25 tons per year, shall commence operation after January 1, 1980 and is governed by no other provisions of Article 8. Pursuant to this rule, a Best Available Control Technology (BACT) Analysis is required. This fiberglass tub and shower manufacturing facility has not been constructed yet and the potential VOC emissions are 263 tons per year. Since 326 IAC 2-4.1-1 (New Source Toxics Control) is the most stringent authority for controlling VOC/HAPs emissions, the MACT determined under 326 IAC 2-4.1-1 shall be the BACT and shall satisfy the requirements of 326 IAC 8-1-6 (BACT).

## Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this modification are as follows:

- (a) The Torit-Donaldson dust collector for PM control shall be in operation at all times when the grinding area is in operation.
- (b) The dry filters for PM control shall be in operation at all times when the gel coat booths and lamination area are in operation.
- (c) Weekly inspections shall be performed to verify the placement, integrity and particle loading of the filters. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (d) Monthly inspections shall be performed of the coating emissions from the stacks and the presence of overspray on the rooftops and the nearby ground, weather permitting. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (e) Weekly visible emission notations of the fiberglass facilities' stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
  - (1) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
  - (2) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

- (3) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (4) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.
- (f) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

These monitoring conditions are necessary because the dry filters for the fiberglass operations and the Torit-Donaldson dust collector for grinding operations surface coating operations must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-2 (PSD).

### **Conclusion**

The construction and operation of this fiberglass tub and shower manufacturer facility shall be subject to the conditions of the attached proposed Significant Source Modification No. 099-12250-00080.

## Appendix A

### Summary of Applicant Supplied Emissions Calculations

The following table is a summary of emissions calculations supplied by the applicant, and verified by the Office of Air Management. The actual calculations submitted by the applicant follow on pages 1 through 6 of 6.

Process	Uncontrolled PM (TPY)		Controlled PM (TPY)		VOC (TPY)		HAPS (TPY)	
	Expected Actual	PTE	Expected Actual	PTE	Expected Actual	PTE	Expected Actual	PTE
Gel Coat Booths	16.97	72.88	1.02	4.37	32.39	139.08	32.40	139.15
Lamination Booths	53.24	288.62	3.19	13.70	28.57	122.69	27.92	119.89
Final Finish	< .01	< .04	< .01	< .04	0.24	1.02	.05	0.23
Grinding	6.91	29.69	.007	.029				
Total	77.13	391.23	4.23	18.14	61.20	262.79	60.37	259.27

Expected actual emissions are based upon full production of 21.9 tub/showers per hour, 2,040 hours per year (255 working days at 8 hours per day). Potential emissions were calculated by extrapolating the expected actual emission rates to 8,760 hours per year.

**NOTE 2B: PROJECTED RAW MATERIAL USAGE RATES**  
**C&C Fiberglass, Tub & Shower Division**

RAW MATERIAL	ESTIMATED USAGE (lb/yr)*	ESTIMATED USAGE (lb/hr)**
<b>GELCOAT AREA</b>		
⇒ Tangerine Tooling Gel Coat	540.00	0.3
⇒ W-419-LUU Gel Coat	484460.00	237.4
<b>LAMINATION AREA</b>		
Resins:		
⇒ COR-54-AA-526 Resin	1,592,905.00 ***	780.8
⇒ 33-350 Tooling Resin	2720.00	1.3
⇒ 33-540 Tooling Resin	6900.00	3.4
Catalysts:		
⇒ CADOX D-50 Clear	3,360.00	1.6
⇒ CADOX D-50 Red	7,908.00	3.9
⇒ 104-311 Hi Point 90 MEKP	48.00	< 0.1
⇒ 46-747 MEKP	64.00	< 0.1
⇒ 46-750 Cumene HPO	216.00	0.1
⇒ 46-757 Cumene HPO	48.00	< 0.1
Glass:		
⇒ Woven Roving	324,630.60	159.1
⇒ Fiberglass Mat	17,189.00	8.4
Solvent:		
⇒ Acetone	83,178.00	40.8
Fillers:		
⇒ Fumed Silica (HDK-N20-WCKR)	200.00	< 0.1
⇒ 7323 Milled Fiber	650.00	0.3
⇒ Klean Klay	290.00	0.1
⇒ A208 Hydrated Aluminum	4950.00	2.4
⇒ Prupro 8 CaCO <sub>3</sub>	600.00	0.3
⇒ Foamboard	?	?
⇒ Wood Products	?	?
Wax/Release:		
⇒ W-5 Paste Wax	210.00	0.1
⇒ B-005 Super Cut	291.90	0.1
⇒ BSP 400 Flange Wax	1,300.00	0.6
⇒ TR 210 Self Strip	374.40	0.2
⇒ 4005 Econo EdgeWax	32.85	< 0.1
<b>GRINDING</b>		
<b>P</b>	<b>0.00</b>	<b>0.0</b>
<b>FINAL FINISH</b>		
Fillers:		
⇒ 70015 Body Filler	4,710.80	2.3
⇒ 5788-C-90008 Booster	33.28	< 0.1
⇒ ADT#17 Body Filler	81.70	< 0.1
⇒ #7 AKP Filler	14.76	< 0.1
Catalyst:		
⇒ 50% BPO Cream Hardener	96.25	< 0.1
⇒ 35% BPO Cream Hardener	0.50	< 0.1
⇒ 46-559 Promotor	42.68	< 0.1
Finishing compounds:		
⇒ USC 712 Finish Rub	800.00	0.4
⇒ TR-308 Fine Finish	126.00	< 0.1
Miscellaneous:		
⇒ Sikaflex	59.92	< 0.1
⇒ TSL-12800	67.97	< 0.1
⇒ PMO-3200	22.26	< 0.1
⇒ 38-32R Red Buff	39.00	< 0.1
⇒ Dykem Blue	35.05	< 0.1
⇒ Black Magnum	100.00	< 0.1

\* Based on data from an equivalent facility (C & C Fiberglass, Transportation Division 1999 raw material purchasing records)

\*\* Based on a projected production year of 2,040 hr (255 working days @ 8 hr/day)

\*\*\* Estimate based on projected production and material usage rates.

**NOTE 9B: PM EMISSIONS**  
**C&C Fiberglass, Inc., Tub and Shower Division**

VOC CONTAINING COMPOUND	QUANTITY PURCHASED (LB)	NON-VOLATILE CONTENT (1 - % VOC)	APPLICABLE EMISSION FACTOR (1 - TRANSFER EFFICIENCY)	PM EMISSIONS (lb/yr)
<b>GELCOAT AREA</b>				
<b>Gel Coat:</b>				
⇒ Tangerine Tooling Gel Coat	540.00	0.63	0.10	34.02
⇒ W419-LUU Gel Coat	484460.00	0.70	0.10	33912.20
<b>Gel Coat PM Emissions (lb/yr)</b>				<b>33946.22</b>
<b>LAMINATION AREA</b>				
<b>Resin:</b>				
⇒ COR54-AA-526 Resin	1592905.00	0.665	0.10	105928.20
⇒ 33-350 Tooling Resin	2720.00	0.52	0.10	141.44
⇒ 33-540 Tooling Resin	6900.00	0.54	0.10	372.60
<b>Catalyst:</b>				
⇒ CADOX D-50 Clear	3360.00	0.00	0.10	0.00
⇒ CADOX D-50 Red	7908.00	0.00	0.10	0.00
⇒ 104-311 Hi Point 90 MEKP	48.00	1.00	0.10	4.80
⇒ 46-747 MEKP	64.00	1.00	0.10	6.40
⇒ 46-750 Cumene HPO	216.00	1.00	0.10	21.60
⇒ 46-757 Cumene HPO	48.00	1.00	0.10	4.80
<b>Glass:</b>				
⇒ Woven Roving	324630.00	**	0.00	0.00
⇒ Fiberglass Mat	17189.00	**	0.00	0.00
<b>Solvents:</b>				
⇒ Acetone*	83178.00	**	0.00	0.00
<b>Fillers:</b>				
⇒ Fumed Silica (HDK-N20-WCKR)	200.00	**	0.00	0.00
⇒ 7323 Milled Fiber	650.00	**	0.00	0.00
⇒ Klean Klay	290.00	**	0.00	0.00
⇒ A208 Hydrated Aluminum	4950.00	**	0.00	0.00
⇒ Prupro 8 CaCO <sub>3</sub>	600.00	**	0.00	0.00
⇒ Foam Board	?	**	0.00	0.00
⇒ Wood Products	?	**	0.00	0.00
<b>Wax/Release:</b>				
⇒ W-5 Paste Wax	210.00	**	0.00	0.00
⇒ B-005 Super Cut	291.90	**	0.00	0.00
⇒ BSP 400 Flange Wax	1300.00	**	0.00	0.00
⇒ TR-210 Self Strip	374.40	**	0.00	0.00
⇒ 4005 Econo Edge Wax	32.85	**	0.00	0.00
<b>Lamination PM Emissions (lb/hr)</b>				<b>106479.84</b>
<b>GRINDING</b>				
<b>Grinding PM Emissions (lb/hr)</b>				<b>0.00</b>
<b>FINAL FINISH</b>				
<b>Fillers:</b>				
⇒ 70015 Body Filler	4710.80	**	0.10	0.00
⇒ 5788-C-90008 Patch Booster	33.28	0.35	0.10	1.16
⇒ ADT #17 Body Filler	81.70	**	0.10	0.00
⇒ #7 AKP Body Filler	14.76	**	0.10	0.00
<b>Catalyst:</b>				
⇒ 50% BPO Cream Hardener	96.25	**	0.00	0.00
⇒ 35% BPO Cream Hardener	0.50	**	0.00	0.00
⇒ 46-559 Promotor	42.68	1.00	0.10	4.27
<b>Finishing Compounds:</b>				
⇒ USC 712 Finish Rub	800.00	**	0.00	0.00
⇒ TR-308 Fine Finish	126.00	**	0.00	0.00
<b>Miscellaneous:</b>				
⇒ Sika Flex	59.92	**	0.00	0.00
⇒ Throat Seal Oil 12800	67.97	**	0.00	0.00
⇒ Pump Motor Oil 3200	22.26	**	0.00	0.00
⇒ 38-32R Buff Bar	39.00	**	0.00	0.00
⇒ Dykem Blue	35.05	**	0.00	0.00
⇒ Black Magnum	100.00	**	0.00	0.00
<b>Final Finish PM Emissions (lb/yr)</b>				<b>5.43</b>
<b>TOTAL FACILITY PM EMISSIONS (lb/yr)</b>				<b>140431.49</b>

\* PM emissions based on 1999 raw material usage and MSDS information, including VOC content (less water and exempt solvents), and percent non-volatile content, as available.

\*\* Non-spray operation.

**NOTE 9B, continued: PM EMISSIONS**  
**C&C Fiberglass, Inc., Tub and Shower Division**

GELCOAT PM EMISSIONS

	lb/hr	TPY
Actual Emission	16.64	16.97
Potential to Emit***	71.46	72.88

\*\*\* PTE = Actual (8760 hr/yr/2040 hr/yr)

LAMINATION PM EMISSIONS

	lb/hr	TPY
Actual Emission	52.19	53.24
Potential to Emit***	224.14	228.62

\*\*\* PTE = Actual (8760 hr/yr/2040 hr/yr)

FINAL FINISH PM EMISSIONS

	lb/hr	TPY
Actual Emission	< 0.01	< 0.01
Potential to Emit***	< 0.04	< 0.04

\*\*\* PTE = Actual (8760 hr/yr/2040 hr/yr)

**NOTE 10B: VOC EMISSIONS\***  
**C&C Fiberglass, Inc., Tub and Shower Division**

VOC CONTAINING COMPOUND	QUANTITY PURCHASED (lb)	MONOMER OR VOLATILE CONTENT (.df or lb/gal) ****	APPLICABLE EMISSION FACTOR*	VOC EMISSIONS (lb/yr)
<b>GELCOAT AREA</b>				
<b>Gelcoat Materials:</b>				
⇒ Tangerine Tooling Gel Coat	540.00	0.37	377 lb/lb monomer	101.79
⇒ W-419-LUU Gel Coat	484460.00 ***	0.30	267 lb/lb monomer	64675.41
<b>Gel Coat VOC Emissions (lb/yr)</b>				<b>64777.20</b>
<b>LAMINATION AREA</b>				
<b>Resin:</b>				
⇒ COR54-AA-526 Resin	1592905.00 ***	0.32	68.5 lb/lb monomer	54556.99
⇒ 33-350 Tooling Resin	2720.00	0.48	118 lb/lb monomer	160.48
⇒ 33-540 Tooling Resin	6900.00	0.46	111 lb/lb monomer	382.95
<b>Catalyst:</b>				
⇒ CADOX D-50 Clear	3360.00	0.00	1.00	0.00
⇒ CADOX D-50 Red	7908.00	0.00	1.00	0.00
⇒ 104-311 Hi Point MEKP	48.00	< 0.03	1.00	1.44
⇒ 46-747 MEKP	64.00	0.00	1.00	0.00
⇒ 46-750 Cumene HPO	216.00	0.00	1.00	0.00
⇒ 46-757 Cumene HPO	48.00	0.00	1.00	0.00
<b>Glass:</b>				
⇒ Woven Roving	324630.6	0.00	1.00	0.00
⇒ Fiberglass Mat	17189.00	0.00	1.00	0.00
<b>Solvents:</b>				
⇒ [Acetone] **	83178.00	0.00	1.00	0.00
<b>Fillers:</b>				
⇒ Fumed Silica (HDK N20 WCKR)	200.00	0.00	1.00	0.00
⇒ 7323 Milled Fiber	650.00	0.00	1.00	0.00
⇒ Klean Klay	290.00	0.3944	1.00	114.38
⇒ A208 Hydrated Aluminum	4950.00	0.00	1.00	0.00
⇒ Prupro 8 CaCO <sub>3</sub>	600.00	0.00	1.00	0.00
⇒ Foam board	?	0.00	1.00	0.00
⇒ Wood Products	?	0.00	1.00	0.00
<b>Wax/Release:</b>				
⇒ W-5 Paste Wax	210.00	0.90	1.00	189.00
⇒ B-005 Super Cut	291.90	2.13 lb/gal	1.00	74.55
⇒ BSP 400 Flange Wax	1300.00	1.00	1.00	1300.00
⇒ TR-210 Self Strip	374.40	6.9 lb/gal	1.00	358.80
⇒ 4005 Econo Edge Wax	32.85	0.123	1.00	4.04
<b>Lamination VOC Emissions (lb/yr)</b>				<b>57142.63</b>
<b>GRINDING</b>				
<b>Grinding VOC Emissions (lb/yr)</b>				<b>0.00</b>
<b>FINAL FINISH</b>				
<b>Fillers:</b>				
⇒ 70015 Body Filler	4710.80	0.18	38.5 lb/lb monomer	90.68
⇒ 5788-C-90008 Patch Booster	33.28	0.65	171.1 lb/lb monomer	2.85
⇒ ADT #17 Body Filler	81.70	< 0.20	1.00	16.34
⇒ #7 AKP Body Filler	14.76	2.24 lb/gal	1.00	2.32
<b>Catalyst:</b>				
⇒ 50% BPO Cream Hardener	96.25	0.20	1.00	19.25
⇒ 35% BPO Cream Hardener	0.50	0.20	1.00	0.10
⇒ 46-559 Promotor	42.68	0.75	1.00	32.01
<b>Finishing Compounds:</b>				
⇒ USC 712 Finish Rub	800.00	0.33	1.00	264.00
⇒ TR-308 Fine Finish	126.00	0.8 lb/gal	1.00	11.20
<b>Miscellaneous:</b>				
⇒ Sika Flex	59.92	< 0.06	1.00	3.59
⇒ Throat Seal Oil 12800	67.97	0.00	1.00	0.00
⇒ Pump Motor Oil 3200	22.26	0.00	1.00	0.00
⇒ 38-32R Buff Bar	39.00	0.00	1.00	0.00
⇒ Dykem Blue	35.05	6.27 lb/gal	1.00	31.35
⇒ Black Magnum	100.00	0.00	1.00	0.00
<b>Total Final Finish VOC's (lb/yr)</b>				<b>473.69</b>
<b>TOTAL FACILITY VOC EMISSIONS (lb/yr)</b>				<b>121720.77</b>

\* VOC emissions based on 1999 raw material usage and MSDS information, including VOC content (less water and exempt solvents), or percent volatile content, as available.  
 \*\* Acetone has recently been listed as a nonphotochemically reactive compound and is therefore exempted from VOC definition.  
 \*\*\* Estimated based on projected production and materials usage rates.  
 \*\*\*\* .df = decimal fraction.

**NOTE 10B, Continued: VOC EMISSIONS\***



**C&C Fiberglass, Inc., Tub and Shower Division**

**GELCOAT VOC EMISSIONS**

	<b>lb/hr</b>	<b>TPY</b>
Actual Emission	31.75	32.39
Potential to Emit***	136.35	139.08

\*\*\* PTE = Actual (8760 hr/yr/2040 hr/yr)

**LAMINATION VOC EMISSIONS**

	<b>lb/hr</b>	<b>TPY</b>
Actual Emission	28.01	28.57
Potential to Emit***	120.03	122.69

\*\*\* PTE = Actual (8760 hr/yr/2040 hr/yr)

**FINAL FINISH VOC EMISSIONS**

	<b>lb/hr</b>	<b>TPY</b>
Actual Emission	0.23	0.24
Potential to Emit***	0.99	1.02

\*\*\* PTE = Actual (8760 hr/yr/2040 hr/yr)

**NOTE 12B: PM EMISSIONS FROM THE GRINDING AREA**  
**C&C Fiberglass, Inc., Tub and Shower Division**

Torit-Donaldson ECB dust collection drawer tared and weighted after use:

Net Weight of 1 drawer: 15.25-lb dust collected in 9 hours

PM Emissions: (15.2-lb PM) / (drawer) (9-hr) X (4-drawers) = 6.78 lb/hr

**GRINDING PM EMISSIONS \***

	<b>lb/hr</b>	<b>TPY</b>
Actual Emission	6.78	6.91
Potential to Emit***	29.11	29.69

\*\*\* PTE = Actual (8,760 hr/yr/2,040 hr/yr)

\* Based on the operation of a similar facility (C & C Fiberglass, Inc., Transportation Division).